steadily to reach practical cut-off at not more than 5 degrees outside the prescribed sectors.

(b) All-round lights shall be so located as not to be obscured by masts, topmasts or structures within angular sectors of more than 6 degrees, except anchor lights prescribed in Rule 30, which need not be placed at an impracticable height above the hull, and the all-round white light described in Rule 23(d), which may not be obscured at all.

§84.19 Vertical sectors.

- (a) The vertical sectors of electric lights as fitted, with the exception of lights on sailing vessels underway and on unmanned barges, shall ensure that:
- (1) At least the required minimum intensity is maintained at all angles from 5 degrees above to 5 degrees below the horizontal;
- (2) At least 60 percent of the required minimum intensity is maintained from 7.5 degrees above to 7.5 degrees below the horizontal.
- (b) In the case of sailing vessels underway the vertical sectors of electric lights as fitted shall ensure that:
- (1) At least the required minimum intensity is maintained at all angles from 5 degrees above to 5 degrees below the horizontal;
- (2) At least 50 percent of the required minimum intensity is maintained from 25 degrees above to 25 degrees below the horizontal.
- (c) In the case of unmanned barges the minimum required intensity of electric lights as fitted shall be maintained on the horizontal.
- (d) In the case of lights other than electric lights these specifications shall be met as closely as possible

[CGD 81-008, 46 FR 62447, Dec. 24, 1981, as amended by CGD 89-024, 55 FR 3947, Feb. 6, 1990]

§84.21 Intensity of non-electric lights.

Non-electric lights shall so far as practicable comply with the minimum intensities, as specified in the Table given in §84.15.

§84.23 Maneuvering light.

Notwithstanding the provisions of \$84.03(f), the maneuvering light described in Rule 34(b) shall be placed approximately in the same fore and aft

vertical plane as the masthead light or lights and, where practicable, at a minimum height of one-half meter vertically above the forward masthead light, provided that it shall be carried not less than one-half meter vertically above or below the after masthead light. On a vessel where only one masthead light is carried the maneuvering light, if fitted, shall be carried where it can best be seen, not less than one-half meter vertically apart from the masthead light.

§84.25 Approval. [Reserved]

PART 85—ANNEX II: ADDITIONAL SIGNALS FOR FISHING VESSELS FISHING IN CLOSE PROXIMITY

Sec.

85.1 General.

85.3 Signals for trawlers.

85.5 Signals for purse seiners.

AUTHORITY: Sec. 3, Pub. L. 96-591; 49 CFR 1.46(n)(14).

SOURCE: CGD 81-006, 46 FR 61845, Dec. 21, 1981, unless otherwise noted.

§85.1 General.

The lights mentioned herein shall, if exhibited in pursuance of Rule 26(d), be placed where they can best be seen. They shall be at least 0.9 meter apart but at a lower level than lights prescribed in Rule 26(b)(i) and (c)(i) contained in the Inland Navigational Rules Act of 1980, as amended (33 U.S.C. 2001 et seq.). The lights shall be visible all around the horizon at a distance of at least 1 mile but at a lesser distance from the lights prescribed by these Rules for fishing vessels.

§85.3 Signals for trawlers.

- (a) Vessels when engaged in trawling, whether using demersal or pelagic gear, may exhibit:
- (1) When shooting their nets: two white lights in a vertical line;
- (2) When hauling their nets: one white light over one red light in a vertical line;
- (3) When the net has come fast upon an obstruction: two red lights in a vertical line.
- (b) Each vessel engaged in pair trawling may exhibit:

- (1) By night, a searchlight directed forward and in the direction of the other vessel of the pair;
- (2) When shooting or hauling their nets or when their nets have come fast upon an obstruction, the lights prescribed in paragraph (a) of this section.

§85.5 Signals for purse seiners.

Vessels engaged in fishing with purse seine gear may exhibit two yellow lights in a vertical line. These lights shall flash alternately every second and with equal light and occultation duration. These lights may be exhibited only when the vessel is hampered by its fishing gear.

PART 86—ANNEX III: TECHNICAL DETAILS OF SOUND SIGNAL APPLIANCES

Subpart A-Whistles

C		

- 86.01 Frequencies and range of audibility.
- 86.03 Limits of fundamental frequencies.
- 86.05 Sound signal intensity and range of audibility.
- 86.07 Directional properties.
- 86.09 Positioning of whistles.
- 86.11 Fitting of more than one whistle.
- 86.13 Combined whistle systems.
- 86.15 Towing vessel whistles.

Subpart B-Bell or Gong

- 86.21 Intensity of signal.
- 86.23 Construction.

Subpart C—Approval

86.31 Approval. [Reserved]

AUTHORITY: Sec. 3, Pub. L. 96–591; 49 CFR 1.46(n)(14).

SOURCE: CGD 81-009, 46 FR 61848, Dec. 21, 1981, unless otherwise noted.

Subpart A—Whistles

§86.01 Frequencies and range of audibility.

The fundamental frequency of the signal shall lie within the range 70-525 Hz. The range of audibility of the signal from a whistle shall be determined by those frequencies, which may include the fundamental and/or one or more higher frequencies, which lie within the frequency ranges and provide the sound pressure levels specified in §86.05.

§86.03 Limits of fundamental frequencies.

To ensure a wide variety of whistle characteristics, the fundamental frequency of a whistle shall be between the following limits:

- (a) 70-200 Hz, for a vessel 200 meters or more in length;
- (b) 130-350 Hz, for a vessel 75 meters but less than 200 meters in length;
- (c) 250-525 Hz, for a vessel less than 75 meters in length.

§86.05 Sound signal intensity and range of audibility.

A whistle on a vessel shall provide, in the direction of the forward axis of the whistle and at a distance of 1 meter from it, a sound pressure level in at least one $\frac{1}{3}$ -octave band of not less than the appropriate figure given in Table 86.05 within the following frequency ranges (± 1 percent):

- (a) 130-1200 Hz, for a vessel 75 meters or more in length;
- (b) 250–1600 Hz, for a vessel 20 meters but less than 75 meters in length;
- (c) 250-2100 Hz, for a vessel 12 meters but less than 20 meters in length.

TABLE 86.05

Length of vessel in meters	Fun- damental frequency range (Hz)	For measured fre- quencies (Hz)	1/3-octave band level at 1 meter in dB re- ferred to 2×10 ⁻⁵ N/ m ²	Audibility range in nautical miles
		130–180	145	
200 or more	70–200	180-250	143	2
		250-1200	140	
		130–180	140	
75 but less than 200	130-350	180-250	138	1.5
		250-1200	134	
		250-450	130	
20 but less than 75	250-525	450-800	125	1.0